



POINT OF REMOTENESS
DISTANCE TO EXIT
A = 113' B = 137'

POINT OF REMOTENESS
DISTANCE TO EXIT
A = 59' B = 123'

COMMERCIAL STREET

POINT OF REMOTENESS
DISTANCE TO EXIT
A = 98' B = 92'

SECOND FLOOR CODE COMPLIANCE PLAN

SCALE: 3/16" = 1'-0"

NOTE: SEE SHEET LS-1 FOR ADDITIONAL INFORMATION.



CODE ANALYSIS

NFPA 101 Life Safety Code - 2009/2015 Edition (*) Denotes if fully Sprinkled/Alarmed

Building Classification: Existing Business # Mercantile
 Total First Floor Area (Mercantile) = 9,506 sf
 Total Second Floor Area (Business) = 38,024 sf
 Building Total Floor Area = 47,530 sf
 Second Floor Area - Business Use - 9,506 gross sf
 Ordinary Hazard
 Type III (000)

Hazard Classification:
 Construction Type: SF Mercantile @ 30 sf/occupant = 317 occupants
 SF Business @ 100 sf/occupant = 381 occupants
 Total Building Occupant Load = 698 occupants
 Second Floor Occupant Load = 96 occupants

Separation of Use Rating: Janitor, Mech, Stor Rating: 1 hour
 Stair Rating: 2 hours (1 hour)
 Elevator Shaft Rating: 2 hours (over 3 stories)
 Minimum Stair width: 44" clear; 36" if less than 50 occupants
 Maximum Riser height: 7"
 Minimum Tread width: 11"
 Minimum Headroom: 6'-8" at stairs; 7'-6" at occupied areas
 Maximum fit between landings: 12'-0"
 Handrail height: 34"-38" @ 42" guardrail
 Handrail top extension: 12" horz
 Handrail bottom extension: 11" angled + 12" horz.
 Handrail diameter: 1-1/4" O.D.
 Maximum baluster open space: less than 4"

Building Uses: Business
 (*) denotes if building is fully sprinkled

Max. Allowable Travel Distance: 200' (300')
 Max. Allowable Common Path: 75' (100')
 Max. Dead End Corridor Length: 20' (50')
 Minimum Egress Corridor Width: 44"/36" if >50 occ.
 Minimum Number of Required Exits: 2 (1 if less than 100 Occupants and less than 100' travel distance to egress floor level exit)

Minimum Horiz Egress Enclosure rating: 1 hr (none)
 Minimum Separation of exits: 0.5 diagonal (0.33)
 Fire Escapes as means of egress: Allowed (NA)
 Minimum Egress Door Width: 36"

Exit Lighting: Required
Emergency Lighting: Required
Fire Alarm System: Required
Fire Sprinkler System: Required
Portable Fire Extinguishers: Required
Exit Devices/Panic Hardware: Required

City of Portland Compliance: NFPA 1 # Portland City Code 10

CODE ANALYSIS (cont.)

Fire Resistance Ratings: Load Bearing Exterior Walls: 2 hours
 Fire Separation Exits (Stairs): 2 hours (1 hour)
 Fire Separation of Uses: 2 hours
 Elevator / Shafts: 2 hours
 Exit Corridors: 1 hour (none)
 Minimum Number of Exits: 2 per occupancy type
 Maximum Dead End Corridor Length: 20'/50' at system furniture under 6' high
 Maximum Common Travel Path: 75' (100')
 200' (300')
 Minimum Corridor Width: 44"/36" if >50 occupants
 Minimum Stair Width: 44"/36" if > 50 occupants
 Maximum Riser Height: 7"
 Minimum Tread Depth: 11"
 Minimum Ramp Width: 44"/36" if > 50 occupants
 Maximum Ramp Pitch: 1:12
 Handrails: Same as NFPA 101
 Minimum Ceiling Height: 7'-6"

Fire Alarm System: Required
Fire Sprinkler System: Required
Portable Fire Extinguishers: Required
Exit Lighting: Required
Emergency Lighting: Required

Building Live Loads:
 Office: 50 psf
 Lobbies: 100 psf
 Corridors: 80 psf
 Storage: 125 psf @ light; 250 psf @ heavy

Interior Finish Requirements: Business B - Sprinkled
 Exit enclosures/passageways: Class B
 Corridors: Class C
 Rooms & enclosed spaces: Class C

Maine State Plumbing Code/UFC:
 Occupancy Classification: Business
 Occupancy Area: 9,604 sf gross
 Occupancy Load: 96 per IBC Table Method

96 Occupants - 48 male/48 female				
FIXTURES	TOILETS	URINALS	LAVS	SHOWERS
Men	1	1	1	NR
Women	3	0	1	NR

Drinking Fountain: 1/150 Occupants - 1 Required
 (or water station)

2009 International Building Code
 (*) denotes if building is fully sprinkled

Use Group Classification: Existing Mercantile - Use Group M - 9,506 sf
 Existing Business - Use Group B - 9,506 sf/floor
 Type III - Combustible/Non-Combustible, Unprotected
 B @ 100 sf/occupant = 381 occupants
 M @ 30 sf/occupant = 317 occupants
 Total Building Occupant Load = 698 occupants
 Second Floor Occupant Load = 96 occupants

Area Use Separation Ratings: Janitor, Mech & Storage Rooms: 1 hour

Building Limitations: IIB Unprotected
 Construction Type: 2 story /5' @ M (+1 story /20')
 Maximum Height: 3 story /5' @ B (+1 story /20')
 Maximum Area / Floor: 12,500 sf @ M (+25,000 sf)
 19,000 sf @ B (+38,000 sf)
 Actual Area/Height: 48,020 SF # 5 Stones (Existing)

End of Analysis

NFPA LEGEND	
SYMBOL	DESCRIPTION
(X)	EXIT LIGHT
(A)	ABC FIRE EXTINGUISHER w/ BRACKET
(E)	EMERGENCY LIGHT
(C)	EMERGENCY LIGHT - CEILING
(S)	SMOKE DETECTOR
(P)	FIRE ALARM PULL STATION
(H)	HORN / STROBE - WALL
(S)	STROBE - WALL
(X)	EMERGENCY / EXIT LIGHT
(E)	EXISTING

SYMBOLS LEGEND	
(Green dashed line)	DIAGONAL
(Red dashed line)	EGRESS PATH
(Green dashed line with triangle)	EGRESS COMMON PATH
(Green dashed line with #)	EGRESS PATH IN FEET
(Green dashed line with 2)	2 HR RATED

WALL TYPES	
(Grey fill)	EXISTING WALLS
(White fill)	NEW PARTITIONS
(Hatched fill)	EXISTING (NO WORK)

- #### LIFE SAFETY NOTES
- MODIFY EXISTING NFPA 13 FIRE SUPPRESSION SPRINKLER SYSTEM AS REQUIRED. SPRINKLER SYSTEM MODIFICATIONS SHALL BE REVIEWED AND APPROVED BY THE STATE OF MAINE FIRE MARSHAL AS WELL AS THE LOCAL AUTHORITY HAVING JURISDICTION. THE SPRINKLER CONTRACTOR SHALL BEAR SOLE RESPONSIBILITY FOR THE DESIGN AND INSTALLATION OF THE SYSTEM FOR OCCUPANCY.
 - MODIFY EXISTING FIRE ALARM SYSTEM AS REQUIRED FOR COMPLIANCE WITH NFPA 101 LIFE SAFETY CODE. COORDINATE WITH SPRINKLER SYSTEM. VERIFY LOCATION OF ALARM AND NOTIFICATION PANELS WITH THE AUTHORITY HAVING JURISDICTION.
 - SEE ACCESSIBILITY DETAILS FOR MOUNTING HEIGHTS OF LIFE SAFETY DETAILS.



REVISIONS: 11.6.17

DRAWING NAME: MEMIC RENOVATION TO THE SECOND FLOOR OFFICES
 PORTLAND, MAINE 04101
 245 COMMERCIAL ST.

SHEET: SECOND FLOOR CODE COMPLIANCE PLAN

DATE: 26 OCT 2017
 SCALE: 3/16" = 1'-0"
 DRAWN: MFH/mgk
 JOB NO.: 170831

SHEET: A-1
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